DRAFT AMENDMENT
Serial No. 09/964,238

IN THE CLAIMS:

The proposed amendment to claim 2 is shown below, with the changes relative to the prior response.

1. (Withdrawn) A process for producing a SMAD interacting protein comprising:

conducting a two-hybrid screening assay wherein SMAD C-domain fused to a DNA-binding domain is used as bait and a vertebrate cDNA library is used as prey;

identifying a SMAD interacting protein in said two-hybrid assay; and

isolating said SMAD interacting protein.

2. **(Draft amendment)** An isolated SMAD interacting protein produced by the process comprising:

conducting a two-hybrid screening assay, wherein a SMAD C-terminal domain from a SMAD protein selected from the group consisting of 1, 2 and 5 is fused to a DNA-binding domain is used as bait and a vertebrate cDNA library is used as prey in said two-hybrid screening assay;

identifying a SMAD interacting protein or fragment thereof in said two-hybrid assay; ~~and~~

determining that the SMAD interacting protein or fragment thereof binds to E2 box sites and interferes with Brachyury-mediated transcription activation in cells; and

isolating said SMAD interacting protein or fragment thereof.

3. (Allowed) An isolated SMAD interacting protein of the family of zinc finger/homeodomain proteins including d-crystallin enhancer binding protein and/~~or~~ *Drosophila* zfh-1, wherein said SMAD interacting protein:

does not interact with full size XSMAD1 in yeast,

binds to E2 box sites,

binds to the Brachyury protein binding site,

interferes with Brachyury-mediated transcription activation in cells, and

interacts with a C-domain of SMAD 1, 2 and 5.

4-7. (Canceled)

8. (Allowed) An isolated polypeptide comprising the amino acid sequence of SEQ ID NO: 2 or a functional fragment thereof, wherein said functional fragment binds to the SMAD1 C-domain in a yeast two-hybrid assay, wherein said SMAD1 C-domain is expressed as a DNA-binding domain fusion in said assay.

9. (Canceled)

10. (Allowed) A pharmaceutical composition comprising the polypeptide of claim 8, together with a suitable carrier.

11-17. (Canceled)

18. (Withdrawn) A polypeptide comprising the amino acid sequence of SEQ ID NO: 4 or a functional fragment thereof.

19-20. (Canceled)

21. (Allowed) An isolated polypeptide comprising the amino acid sequence depicted as the one letter code QHLGVGMEAPLLGFPTMNSNLSEVQKVLQIVDNTVSRQKMDCKTEDISKLK (SEQ ID NO: 21) necessary for binding with SMAD.

22. (Withdrawn) A SMAD interacting protein of a family of proteins which contain a cluster of 5 CCCH-type zinc fingers including *Drosophila* "Clipper" and Zebrafish "No arches" wherein said SMAD interacting protein

interacts with full size XSMAD1 in yeast,
binds single or double stranded DNA,
has an RNase activity, and
interacts with C-domain of SMAD1, 2 and/or 5.

23. (Canceled)

24. (Allowed) The isolated polypeptide of claim 8, wherein the functional fragment is selected from the group consisting of amino acids 44-236 of SEQ ID NO:2, amino acids 166-236 of SEQ ID NO:2, and amino acids 44-216 of SEQ ID NO:2.

25. (Allowed) An isolated polypeptide comprising the amino acid sequence of SEQ ID NO: 2 or a fragment that binds to an E2 box site in an electrophoretic mobility shift assay.

26. (Allowed) The isolated polypeptide of claim 25, wherein the functional fragment comprises amino acids 977-1214 of SEQ ID NO:2.